

WHAT IS CLAIMED IS:

1. An interface device coupled to a board on which integrated circuits are mounted for providing electrostatic discharge protection for the integrated circuits, comprising:

a plurality of first contact members, each of the first contact members including one end connected to the board and the other end to connect to an external device; and

at least one second contact member connected to a voltage line of a voltage level,

wherein the at least one second contact member includes a length greater than that of each of the first contact members.

2. The device of claim 1, the first and second contact members further comprising a pin and a receptacle.

3. The device of claim 1, wherein electric charges accumulated on the board are discharged via the at least one second contact member when the board is coupled to the external device through the interface device.

4. An interface device coupled to a board on which integrated circuits are mounted for providing electrostatic discharge protection for the integrated circuits, comprising:

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a plurality of first contact members of a first length, each of the first contact members including one end connected to the board and the other end to connect to an external device; and

at least two second contact members of a second length, each of the second contact members being connected to a voltage line of a voltage level;

wherein the second length is greater than the first length such that when the board is coupled to the external device through the interface device in a direction, the second contact members contact the external device earlier than the first contact members.

5. The device of claim 4 wherein each of the first and second contact members includes a pin.

6. The device of claim 4 wherein each of the first and second contact members includes a receptacle.

7. The device of claim 5 wherein the external device includes a different interface device of which each contact member includes a receptacle corresponding to the pin.

8. The device of claim 6 wherein the external device includes a different interface device of which each contact member includes a pin corresponding to the receptacle.

9. The device of claim 4 further comprising VDD or VSS voltage lines.

10. The device of claim 4 wherein the at least two second contact members include one connected to a first voltage line of a first voltage level, and another connected to a second voltage line of a second voltage level smaller than the first voltage level.

11. An interface device formed on a board on which integrated circuits are mounted for providing electrostatic discharge protection for the integrated circuits, comprising:

a plurality of a first contact lines of a first length, each of the first contact lines including one end connected to the board and the other end to connect to an external device, the one ends of the first contact lines being aligned to an aligning line;

at least one second contact line of a second length corresponding to at least one voltage line of a first voltage level to which the integrated circuits are connected, each of the at least one second contact line being connected to a corresponding voltage line at one end aligned with the aligning line; and

a third contact line connected to a second voltage level including a third length measured from the aligning line to one end of the third contact line;

wherein the second length and the third length are greater than the first length.

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12. The device of claim 11 wherein the third length is greater than the second length such that when the board is coupled to the external device, and electric charges accumulated on the board are discharged via the third contact line.
13. The device of claim 11 wherein the third length is equal to the second length such that when the board is coupled to the external device, and electric charges accumulated on the board are discharged via at least one of the third contact line or second contact line.
14. The device of claim 11 wherein the first and second voltage levels include VDD or VSS.
15. The device of claim 11 wherein the at least one voltage line includes a VDD line and a VSS line.
16. The device of claim 11 wherein the at least one second contact line is connected to a VDD line.
17. The device of claim 11 wherein the at least one second contact line is connected to a VSS line.
18. The device of claim 11 wherein the at least one second contact line includes one connected to a VDD line and another connected to a VSS line.

19. An interface device formed on a board on which integrated circuits are mounted for providing electrostatic discharge protection for the integrated circuits, comprising

a plurality of a first contact lines formed near a side of the board, each of the first contact lines including one end connected to the board and the other end to connect to an external device; and

at least one second contact line formed near the same side of the board corresponding to at least one voltage line of a voltage level to which the integrated circuits are connected, each of the at least one second contact line including one end connected to a corresponding voltage line and another end connected to the external device.

20. The device of claim 19 further comprising VDD and VSS lines.

21. The device of claim 19 wherein the one end of each of the first contact lines and the at least one second contact line is aligned with each other to an aligning line.

22. The device of claim 21 wherein each of the at least one second contact line includes a second length measured from one end to another end of the second contact line, and each of the first contact lines includes a first length, and the second length is greater than the first length.

23. The device of claim 19 wherein the at least one second contact line includes one connected to a VDD line and another connected to a VSS line.
24. The device of claim 23 wherein the second contact line connected to the VSS line is disposed closer to the edge than the second contact line connected to the VDD line.
25. The device of claim 22 wherein the at least one second contact line includes one connected to a VDD line and another connected to a VSS line.
26. The device of claim 25 wherein the length of the second contact line connected to the VSS line is greater than that of the second contact line connected to the VDD line.
27. The device of claim 25 wherein the length of the second contact line connected to the VSS line is equal to that of the second contact line connected to the VDD line.
28. A detecting system for detecting integrated circuits formed on a board, comprising:
- a test device including a first board;
  - a plurality of first pins formed on the first board;
  - a second board including a first surface and a second surface;

a plurality of first contact points formed on the first surface of the second board to receive the first pins;

a plurality of second pins formed on the second surface of the second board;  
and

a plurality of second contact points formed on each of the integrated circuits to receive the second pins,

wherein electric charges accumulated on the board on which the integrated circuits are formed are discharged from the longer of the first pins and the second pins.

29. The system of claim 28 further comprising VDD and VSS lines.

30. The system of claim 28 wherein the at least one longer pin includes one connected to a VDD line and the other connected to a VSS line.

31. A method of providing electrostatic discharge protection for integrated circuits formed on a board, comprising:

providing an interface device including:

a plurality of first contact members, each of the first contact members including one end connected to the board and the other end to connect to an external device; and

at least one second contact member connected to a voltage line of a voltage level;

providing the at least one second contact member with a length greater than that of each of the first contact members;

coupling the board to the external device through the interface device; and

discharging electric charges accumulated on the board via the at least one second contact member.

32. The method of claim 31 further comprising forming each of the first and second contact members in one of a pin or a receptacle.

33. The method of claim 31 further comprising connecting the at least one second contact member to one of a VDD or VSS voltage line.

34. A method of providing electrostatic discharge protection for integrated circuits formed on a board, comprising:

forming a plurality of a first contact lines near a side of the board;

providing each of the first contact lines with one end connected to the board and the other end to connect to an external device;

forming at least one second contact line near the same side of the board corresponding to at least one voltage line of a voltage level to which the integrated circuits are connected;

providing each of the at least one second contact line with one end connected to a corresponding voltage line and the other end connected to the external device;

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providing the other end of each of the at least one second contact line closer to an edge on the side of the board than the other end of each of the first contact lines;

coupling the board to the external device; and

discharging electric charges accumulated on the board via the at least one second contact line.

35. The method of claim 34 further comprising connecting the at least one second contact line to one of a VDD or a VSS line.

36. The method of claim 34 further comprising connecting one of the at least one second contact line to a VDD line and connecting the other of the at least one second contact line to a VSS line.

37. The method of claim 36 further comprising providing the second contact line connected to VSS closer to the edge than the second contact line connected to VDD.

38. The method of claim 36 further comprising connecting the other ends of the second contact line connected to VSS and the second contact line connected to VDD to the edge.

39. A method of providing electrostatic discharge protection for integrated circuits formed on a board, comprising:

forming a plurality of a first contact lines of a first length on the board;  
providing each of the first contact lines with one end connected to the board  
and the other end to connect to an external device;  
aligning the one ends of the first contact lines to an aligning line;  
forming at least one second contact line of a second length greater than the  
first length on the board corresponding to at least one voltage line of a first voltage  
level to which the integrated circuits are connected;  
providing each of the at least one second contact line with one end aligned to  
the aligning line;  
connecting the one end of each of the at least one second contact line to a  
corresponding voltage line;  
forming a third contact line connected to a second voltage level;  
providing the third contact line with a third length measured from the aligning  
line to one end of the third contact line, the third length being greater than the first  
length;  
coupling the board to the external device; and  
discharging electric charges accumulated on the board via at least one of the  
third contact line or second contact line.

40. The method of claim 39 further comprising discharging electric charges  
accumulated on the board via the third contact line, wherein the third length is  
greater than the second length.

41. The method of claim 39 further comprising providing each of the first and second voltage levels with one of VDD or VSS.
42. The method of claim 39 further comprising connecting the at least one second contact line to one of a VDD or a VSS line.
43. The method of claim 39 further comprising connecting one of the at least one second contact line to a VDD line and the other to a VSS line.
44. A method of providing electrostatic discharge protection in a detecting system for integrated circuits formed on a board, comprising:
- providing a test device including a first board;
  - forming a plurality of first pins on the first board;
  - providing a second board including a first surface and a second surface;
  - forming a plurality of first contact points on the first surface of the second board to receive the first pins;
  - forming a plurality of second pins on the second surface of the second board;
  - forming a plurality of second contact points on each of the integrated circuits to receive the second pins;
  - providing at least one of the first pins with a length greater than that of the other first pins, or providing at least one of the second pins with a length greater than that of the other second pins;

coupling the first pins to the first contact points and the second pins to the second contact points; and

discharging electric charges accumulated on the board on which the integrated circuits are formed via the at least one first or second pin of a greater length.

45. The method of claim 44 further comprising connecting the at least one first or second pin of a greater length to one of a VDD or a VSS line.

46. The method of claim 44 further comprising connecting one of the at least one first pin of a greater length to a VDD line and the other to a VSS line.

47. The method of claim 44 further comprising connecting one of the at least one second pin of a greater length to a VDD line and the other to a VSS line.